

FORM PTO-1390  
(REV 11-98)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTORNEYS DOCKET NUMBER

XY-Lodo-USNP

TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371

US APPLICATION NO. (If known, see 37 CFR 1.5)

09/001 394  
09/582809

INTERNATIONAL APPLICATION NO.

PCT/US98/27909

INTERNATIONAL FILING DATE

31 December 1998

PRIORITY DATE CLAIMED

31 December 1997

TITLE OF INVENTION

SEX SPECIFIC INSEMINATION OF MAMMALS WITH LOW NUMBER OF SPERM CELLS

APPLICANT(S) FOR DO/EO/US

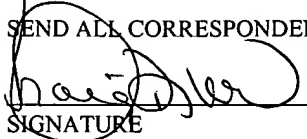
George E. Seidel, Lisa Herickhoff, John Schenk

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is the FIRST submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is the SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b)) and PCT articles 22 and 39(1).
4. ☒ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
  - a. ☒ is transmitted herewith (required only if not transmitted by the International Bureau).
  - b. ☐ has been transmitted by the International Bureau.
  - c. ☒ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☐ A translation of the International Application into English (35 U.S.C. 371(c)(2)).
7. ☐ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3)).
  - a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
  - b. ☐ have been transmitted by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☐ have not been made and will not be made.
8. ☐ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

## Items 11. to 16. below concern document(s) or information included:

11. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98 along with copies of cited references.
12. ☒ An assignment document for recording for George E. Seidel. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included along with a recordation fee.
13. ☒ A FIRST preliminary amendment (to be entered with this filing prior to calculation of the filing fee).  
☐ A SECOND or SUBSEQUENT preliminary amendment.
14. ☐ A substitute specification.
15. ☐ A change of power of attorney and or address letter.
16. ☒ Other items or information:
  - a. Verified Statement Establishing Small Entity Status (Small Business)
  - b. Verified Statement Establishing Small Entity Status (University Employee)
  - c. Verified Statement Establishing Small Entity Status (University)
  - d. Power of Attorney of Dr. Mervyn Jacobson, President of XY, Inc.
  - e. a copy of the International PCT application
  - f. a copy of the Article 34 Amendment
  - g. an Assignment of Patent Rights for Lisa Herickhoff and John Schenk along with a recordation cover sheet & recordation fee
  - h. a Power of Attorney for Arundeeep S. Pradhan, Director of Technology Transfer for Colorado State University Research Foundation as agent for Colorado State University
  - i. a Transmittal Letter to the United States Designated/Elected Office (DO/EO/US) concerning a filing under 35 U.S.C. 371 (Form PTO-1390, rev 11-98) with attachments
  - j. a Letter of Transmittal
  - k. a firm check in the amount of \$ 1098.00
  - l. Certificates of Express Mailing for each document

U.S. APPLICATION NO. (If known, see 37 CFR 1.51) <b>09/7582809</b>		INTERNATIONAL APPLICATION NO PCT/US98/27909		ATTORNEY'S DOCKET NUMBER XY-Lodo-USNP	
17. <input type="checkbox"/> The following fees are submitted: <b>BASIC NATIONAL FEE (37 CFR 1.492(a) (1) - (5):</b> Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO. . . . . \$970.00  International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO. . . . . \$840.00  International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO. . . \$760.00  International preliminary examination fee paid to USPTO (37 CFR 1.482) but all claims did not satisfy provisions of PCT Article 33(1)-(4). . . . . \$670.00  International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfy provisions of PCT Article 33(1)-(4) . . . . . \$ 96.00  <b>ENTER APPROPRIATE BASIC FEE AMOUNT =</b>				<b>CALCULATIONS (PTO USE ONLY)</b>	
Surcharge of \$130.00 for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$ 840	
				\$ 0	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	72-20 =	52	X \$18.00	\$ 936	
Independent claims	1- 3 =	0	X \$78.00	\$ 0	
MULTIPLE DEPENDENT CLAIM(S) (if applicable) +\$260.00				\$ 260	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				\$ 2036	
Reduction of 1/2 for filing by small entity, if applicable. A Small Entity Statement must also be filed (Note 37 CFR 1.9, 1.27, 1.28).				\$ 1018	
<b>SUBTOTAL =</b>				\$ 1018	
Processing fee of \$130.00 for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$ 0	
<b>TOTAL NATIONAL FEE =</b>				\$ 1018	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				\$ 80	
<b>TOTAL FEES ENCLOSED =</b>				\$ 1098	
Amount to be:				Refunded	\$
				Charged	\$
a. <input checked="" type="checkbox"/> A check in the amount of \$ <u>1,098.00</u> to cover the above fees is enclosed. b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees. c. <input type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any over payment to Deposit Account No. _____. A Duplicate copy of this sheet is enclosed.					
<b>Note: Where the appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b))          must be filed and granted to restore the application to pending process.</b>					
SEND ALL CORRESPONDENCE TO:					
 SIGNATURE		<u>Craig R. Miles</u> NAME		<u>45,954</u> REGISTRATION NUMBER	



07 03 - 870

PCT

09/582809

410 Rec'd PCT/PTO 30 JUN 2000

Express Mail No. EL550693793US

Attorney Docket: XY-Lodo-USNP

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IN THE UNITED STATES PATENT AND  
TRADEMARK OFFICE  
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In Re the Application of: George E. Seidel, Lisa Herickhoff, John Schenk

For: Sex Specific Insemination of Mammals With Low Number of Sperm Cells

Serial Number: (original US) 09/001,394 (new) \_\_\_\_\_  
(original US) 09/015,454  
(PCT) PCT/US98/27909

Filed: (original US) 31 December 1997 (new) \_\_\_\_\_  
(original US) 29 January 1998  
(PCT) 31 December 1998

Assignee:

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**LETTER OF TRANSMITTAL**

Assistant Commissioner for Patents  
BOX PCT  
Washington, D.C. 20231

Dear Commissioner:

Enclosed for filing with the United States Designated/Elected Office (DO/EQ/US) are the following documents under 35 U.S.C. 371:

- a. A First Preliminary Amendment to be entered with this filing prior to calculation of the filing fee;
- b. a Declaration for Patent Application of George E. Seidel, Lisa Herickhoff, John Schenk;
- c. an Assignment of Patent Rights for George E. Seidel along with a recordation cover sheet and recordation fee;
- d. an Assignment of Patent Rights for Lisa Herickhoff and John Schenk along with a recordation cover sheet and recordation fee;
- e. a Power of Attorney for XY, Inc. and Colorado State University through its agent

Colorado State University Research Foundation;

- f. a Verified Statement Establishing Small Entity Status 37 CFR 1.9(e) -- University or Other Institution of Higher Learning;
- g. a Verified Statement Establishing Small Entity Status (Small Business Concern);
- h. a Verified Statement Establishing Small Entity Status (University Employee);
- i. a Transmittal Letter to the United States Designated/Elected Office (DO/EO/US) concerning a filing under 35 U.S.C. 371 (Form PTO-1390, rev 11-98) with attachments;
- j. a copy of the International PCT application;
- k. a copy of the Article 34 Amendment;
- l. an Information Disclosure Citation under 37 CFR 1.97 and 1.98 with copies of cited references;
- m. Cashier's check payable to the Commissioner of Patents and Trademarks in the amount of \$ 1098.00;
- n. this Letter of Transmittal; and
- o. Express Mail Certificates for each document.

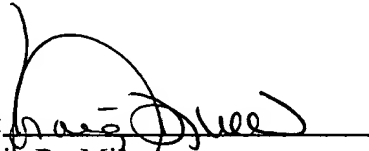
**Please note: This application is a National Phase Application filing under 35 U.S.C. 371 of International Patent Application, Serial No. PCT/US98/27909 which is a Continuation-in-part of U.S. Patent Application No. 09/011,394 and U.S. Patent Application No. 09/015,454 and claims the benefit thereof.**

I have this 30 day of June, 2000, either myself personally or through my direction of staff at this office, deposited all of the items in the above letter of transmittal with the United States Postal Service as Express Mail, postage prepaid, in an envelope addressed to: The Assistant Commissioner for Patents, Box PCT, Washington, D.C. 20231.

Please confirm receipt of the documents by applying your date stamp and serial number on the enclosed postcard and returning it to me.

Dated this 30 day of June, 2000.

Respectfully Submitted,  
SANTANGELO LAW OFFICES, P.C.

By:   
Craig R. Miles  
ATTORNEY FOR APPLICANT  
PTO No. 45,954  
125 South Howes, Third Floor  
Fort Collins, Colorado 80521  
(970) 224-3100

09/582809  
526 Rec'd PCT/PTO 30 JUN 2000

Express Mail No. EL550693793US  
Attorney Docket:XY-Lodo-USNP

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IN THE UNITED STATES PATENT AND  
TRADEMARK OFFICE  
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In Re the Application of: George E. Seidel, Lisa Herickhoff, John Schenk

For: Sex Specific Insemination of Mammals With Low Number of Sperm Cells

Serial Number: (original US) 09/001,394 (new) \_\_\_\_\_  
(original US) 09/015,454  
(PCT) PCT/US98/27909

Filed: (original US) 31 December 1997 (new) \_\_\_\_\_  
(original US) 29 January 1998  
(PCT) 31 December 1998

Assignee:

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**CERTIFICATE OF EXPRESS MAILING**

I, Shannon Nation-Kammerer, hereby certify to the truth of the following items:

1. I am an employee of Santangelo Law Offices, P.C., 125 South Howes, Third Floor, Fort Collins, Colorado 80521.

2. I have this day deposited a copy of the International PCT application with the United States Postal Service as "Express Mail" for mailing to the Assistant Commissioner of Patents, Box PCT, Washington, D.C. 20231.

Dated this 30 day of June, 2000.

Shannon Nation-Kammerer

Express Mail No. EL550693793US  
Attorney Docket:XY-Lodo-USNP

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1. I am an employee of Santangelo Law Offices, P.C., 125 South Howes, Third Floor, Fort Collins, Colorado 80521.

2. I have this day deposited the attached Verified Statement Establishing Small Entity Status (University Employee) with the United States Postal Service as "Express Mail" for mailing to the Assistant Commissioner of Patents, Box PCT, Washington, D.C. 20231.

Dated this 30 day of June, 2000.

  
Shannon Nation-Kammerer

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Dated this 30 day of June, 2000.

*Shannon Nation-Kammerer*



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1. I am an employee of Santangelo Law Offices, P.C., 125 South Howes, Third Floor, Fort Collins, Colorado 80521.

2. I have this day deposited the attached Preliminary Amendment with the United States Postal Service as "Express Mail" for mailing to the Assistant Commissioner of Patents, Box PCT, Washington, D.C. 20231.

Dated this 30 day of June, 2000.

Shannon Nation-Kammerer

09/582809  
528 Rec'd PCT/PTC 30 JUN 2000

Express Mail No. EL550693793US  
Attorney Docket:XY-Lodo-USNP

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Dated this 30 day of June, 2000.

  
Shannon Nation-Kammerer

09/582809

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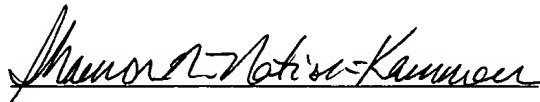
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2. I have this day deposited the attached Declaration for Patent Application with the United States Postal Service as "Express Mail" for mailing to the Assistant Commissioner of Patents, Box PCT, Washington, D.C. 20231.

Dated this 30 day of June, 2000.



THE UNITED STATES PATENT  
TRADEMARK OFFICE

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Shannon Civilization - Kammuch

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09/582809  
526 Rec'd PCT/PTC 30 JUN 2000

Express Mail No. EL550693793US  
Attorney Docket:XY-Lodo-USNP

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2. I have this day deposited the attached Information Disclosure Citation along with copies of the cited references with the United States Postal Service as "Express Mail" for mailing to the Assistant Commissioner of Patents, Box PCT, Washington, D.C. 20231.

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1. I am an employee of Santangelo Law Offices, P.C., 125 South Howes, Third Floor, Fort Collins, Colorado 80521.

2. I have this day deposited the attached Assignment of Patent Rights for Lisa Herickhoff and John Schenk along with a recordation cover sheet with the United States Postal Service as "Express Mail" for mailing to the Assistant Commissioner of Patents, Box PCT, Washington, D.C. 20231.

Dated this 30 day of June, 2000.

Shannon Nation-Kammerer

09/582803  
526 Rec'd PCT/PTC 30 JUN 2000

Express Mail No. EL550693793US  
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